

## **Efficient Click-Stream Data Collection**

### **Abstract of the Disclosure**

A client rendering a web page discovers embedded content directing the client to request embedded content from a data collection server. The data collection server performs a cookie handshake by determining whether the request includes a visitor identifier. If a visitor identifier is present, the request data is collected and categorized with the visitor identifier. If the visitor identifier is not present, the data collection server creates a visitor identifier and do not repeat flag and sends these items with a redirection request to the client, thereby establishing a visitor identifier for the redirected contact. Where the client does not accept visitor identifiers, or the visitor identifier otherwise is lost, the data collection server creates a visitor identifier based on the client's address, or some other available data.